



September 11, 2001

Bradley Benning
Environmental Scientist
United States Environmental Protection Agency
Superfund Division Response Section 2
SE-5J
77 West Jackson Blvd.
Chicago, IL 60604-3590

RE:

Revisions to Work Plan and Site Health & Safety Plan

J. Pitt Melt Shop Site

3151 South California Avenue

Chicago, Illinois

Dear Mr. Benning:

Enclosed with this letter is one copy of revisions to the Work Plan and one copy of revisions to the Site Health & Safety Plan for the referenced site, as requested in your letter dated August 29,2001 to the attention of Mr. Lawrence Fieber of Burns & McDonnell. Please call the undersigned if you have technical questions concerning the enclosed documents.

Sincerely,

Frank Capic

Staff Civil Engineer

FC/fc

CC:

Stuart P. Hersh, Esq. w/Enclosures

Joseph R. Podlewski, Jr., Esq. w/Enclosures

Susan T. Morakalis, Esq. w/Enclosures

# 2.0 Site Background and History

The Site is located in Section 35, Township 39 North, Range 13 East in the City of Chicago, Illinois in the County of Cook and is approximately 6 acres in size (Figure 3). The Site is bordered to the north by a railroad, to the south by the Chicago Sanitary and Ship Canal, to the east by a scrap yard, and to the west by California Avenue and other industrial and commercial operations.

According to the USEPA, the J-Pitt Melt Shop, the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC), formerly known as the Metropolitan Sanitary District, along with Ketler-Elliott Erection Company entered into a lease of the Site property in 1918. The lease was assigned to Hansell-Elcock Company in 1923. In 1961, Hansell-Elcock assigned the lease to California Auto Reclamation Company (more than 50% owned by M.S. Kaplan Company). J-Pitt Melt Shop, Inc. utilized the Site for production of steel billets and blooms from scrap steel between approximately 1994 to 1996. J-Pitt Melt Shop, Inc., was incorporated in Illinois in 1994 and involuntarily dissolved in 1998.

The Site is improved with one building, approximately 240,000 square feet in size. The building consists of three sections: the furnace area at the south end, along the banks of the canal; the billet finishing area at the center; and the office, maintenance and receiving areas at the north end.

## 2.1 PREVIOUS INVESTIGATIONS

On April 5, 2001, the City of Chicago Department of Environment (CDOE) observed an oil-based waste being released from the sheet pile wall along the south side of the Site and flowing into the Chicago Sanitary and Ship Canal. CDOE also observed stored artillery shells. The CDOE requested assistance from the U.S. Army and the USEPA to address the artillery shells and oil impacts.

During a May 11, 2001 telephone interview, arrangements were made for the disposal of munitions by M.S. Kaplan through ATF. Mr. Jim Allison, Supervisory Special Agent for the Explosives Enforcement Group of the U.S. Army, indicated that the artillery shells noted by CDOE were received and have been "destroyed" by the U.S. Army "EOD Unit" from Fort McCoy, Wisconsin, approximately one week after receipt of the artillery shells.

On April 6, 2001, the USEPA's On-Scene Coordinator (OSC), Brad Benning, mobilized Ferguson Harbor, Inc., to the site to assist with site work. To control the oil sheen on the Canal, several pieces of an absorbent boom were placed in the Canal. Further investigation of the Site disclosed drums and other vessels containing oils, grease, baghouse dust, antifreeze, acids, hydraulic fluid, and other unknown liquids; transformers that appeared to have leaked; open pits with unknown contents; large slag and dust piles, and suspect asbestos containing materials. In addition, the U.S. EPA and Illinois Department of Nuclear Safety (IDNS) performed radiation survey throughout the site building. Four large steel kettles in section two were identified as containing radioactive materials, specifically Cesium-137. Another source of Cesium-137 was discovered in a room between the billet finishing area and the furnace area.

Based on the results of the risk assessment, Burns & McDonnell may develop and prepare remedial actions for selected areas and implement necessary remedial action.

#### 3.2 DRUMS

Burns & McDonnell will coordinate the removal and disposal of the approximately (124), 55-gallon drums, the 37, 25-gallon and 5-gallon drums, and approximately 150 small containers based on waste characterization requirements. The investigation of the drums and small containers will first be performed to verify contaminants of concern at the Site. This will include opening and visually assessing drum materials.

Burns & McDonnell will initially investigate by supervising hazardous categorization tests on the approximately (124), 55-gallon drums, the 37, 25-gallon and 5-gallon drums and the approximately 150 small containers. The drums will be screened for the following characteristics:

- pH
- Air Reactive
- Water Reactive
- Oxidizer
- Cyanide
- Sulfide
- Radioactive
- Mercury
- Suspected Perchloric
- Suspected Picric
- Peroxides
- PCBs

Based on the results of the hazardous categorization tests, the drums will be segregated in groups of up to ten waste types. Random sampling of the drums within each waste type will be conducted and laboratory analyzed for the required disposal characterization. Liquids within the drums will be sampled using COLIWASA samplers as outlined in Section 4.4.1. A work plan describing drum disposal methods will be prepared after completion of the work described in this section.

#### 3.3 RADIOACTIVE MATERIALS

The exempt radioactive level gauges consisting of Cesium-137 located within the billet formers and inside a box nearby a billet former will be tested and removed by a properly trained radioactive technician from Ronan Engineering. The billet formers themselves will also be tested to confirm that there is no residual radioactivity within the billet formers. After removal from the facility, the radioactive level gauges and any radioactive billet formers will be properly transported and disposed at a facility certified to accept radioactive materials. Burns & McDonnell will document the removal of the radioactive materials, organize the manifestation and determine any disposal requirements of the billets and four kettles.

## 3.4 RESINOUS MATERIAL

Burns & McDonnell will visually assess areas previously identified by the USEPA to be impacted by PCBs. These areas include the area where resinous material appeared to have spilled from a capacitor within of the facility.

Three surface soil samples to a depth of 1 foot below ground surface (bgs) will be collected to determine the horizontal extent of resinous materials which contains PCBs using a one foot-length trier or trowels. Samples will be collected and analyzed for PCBs.

After surface soil collection is completed, test pits will be conducted within the facility near the location of the identified resinous material to determine the presence of any suspect transformer oils or any structures leaking transformer oils, if any, into the subsurface soil within the facility to a maximum depth of 8 feet bgs. If suspect transformer oil is visibly encountered, up to five soil samples will be collected from the test pit(s) to verify impact from the suspect transformer oils. The analytical parameters for these subsurface samples include polychlorinated biphenyls (PCBs) and total petroleum hydrocarbons (TPH). Figure 3 depicts the proposed test pit locations. Locations were selected based on identified Site conditions. If proposed test pit locations are inaccessible, they will be relocated during site investigation activities to the nearest accessible point adjacent to the proposed sampling location.

## 3.5 VISIBLE OIL BASED WASTE OUTSIDE FACILITY

Burns & McDonnell will visually investigate the oil spillage into the canal to determine if the source area is from the Site. This investigation will involve a visual reconnaissance of the canal wall along the south edge of the Site. In addition, test pits will be performed in the vicinity of the alleged source of the oil based waste on the Property. The test pits will be performed to a maximum depth of 8 feet bgs. If any oil is identified from within the test pits, up to five samples will be collected from the test pit(s) to verify impact from the oil. The analytical parameters for these subsurface samples include polychlorinated biphenyls (PCBs) and total petroleum hydrocarbons (TPH).

Prior to test pit excavation activities, Burns & McDonnell will review historical Sanborn Fire Insurance maps (Sanborn maps) of the Property to identify the potential for the presence of underground storage tanks (USTs) in the vicinity of the alleged source of the oil based waste on the Property. In addition, Burns & McDonnell will perform a visual reconnaissance of the vicinity of the alleged source of the oil based waste to identify the potential presence of USTs. If the review of the Sanborn maps and/or the visual reconnaissance identifies USTs in the vicinity of the alleged source of the oil based waste on the Property, then the test pits will also be performed to confirm the presence of any USTs and visually evaluate the condition of any USTs.

Burns & McDonnell will inspect and maintain an oil sorbent boom on the Chicago Sanitary and Ship Canal to capture the visible oil-based seeping into the canal. If necessary, Burns & McDonnell will

replace the oil sorbent boom and verify proper disposal of the saturated boom to an appropriate disposal facility.

## 3.6 PITS AND SUMPS

Burns & McDonnell will investigate the extent of impacts related to prior usage of pits and sumps observed at the Property.

Up to six liquid samples will be collected from the open pits and sumps located within the facility. Water samples from these areas will be collected using a pond sampler as outlined in Section 4.4.2. The analytical parameters for these water samples will include PCBs and the metals lead, cadmium and chromium. Based on the laboratory analytical results, a risk assessment may be performed on the exposure to the water identified within the pits, sumps, or lagoons. However, Burns & McDonnell may return to perform one hazardous waste characterization composite on the water for disposal, if most practicable. Burns & McDonnell will identify the forward strategy within the monthly report(s) and/or future work plans regarding liquids within pits and sumps.

## 3.7 BAGHOUSE UNITS

Burns & McDonnell will determine the approximate quantity of baghouse dust and will collect two soil/dust samples within the baghouses located both inside and outside the facility. The two soil/dust samples will be collected using sampling triers as outlined in Section 4.1. The two soil/dust samples from the two baghouses will be analyzed for disposal characterization parameters such as select R-Code and extractable organic halogens (EOX). Depending on the results of the disposal characterization, Burns & McDonnell will arrange for the appropriate disposal methodology.

#### 3.8 DUST PILES

Burns & McDonnell will collect three dust samples from the suspect slag or electric arc furnace dust piles located outside the facility using sampling triers or trowels. The three dust samples from the suspect slag or electric arc furnace dust piles outside the facility will be analyzed for disposal characterization parameters such as select R-Code and extractable organic halogens (EOX). Depending on the results of the disposal characterization, Burns & McDonnell will arrange for the appropriate disposal methodology.

## 3.9 DAMAGED DRY GOODS

Burns & McDonnell will collect up to two composite samples from among the damaged dry goods within the facility for disposal characterization using sampling triers or trowels. The two composite samples will be analyzed for a full R-Code, EOX and F-Solvent Scan. Depending on the results of the disposal characterization, Burns & McDonnell will arrange for the appropriate disposal methodology.

#### 3.10 FRIABLE SUSPECT ASBESTOS

Burns & McDonnell will perform site reconnaissance to identify and collect the pieces of friable suspect asbestos pipe insulation fallen onto the floor of the facility. The collected suspect asbestos debris, if any, will be analyzed by polarized light microscopy (PLM) for asbestos content. If the samples reveal that the

suspect materials contain more than one percent asbestos, an asbestos abatement contractor will be retained to remove the asbestos debris.

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# 9.0 -- CONTINGENCY PLAN

## 9.1 MEDICAL EMERGENCIES

- The name, address, telephone number, travel distance, and travel time to the nearest medical
  treatment facility are found in the Emergency Information section (see Page TC-6) of this SHSP. A
  map and direction for locating the facility is available in the Emergency Information section (see
  Page TC-8) of this SHSP.
- 2. Emergency routes will be verified and driven before any Site activities. It may be quicker to transport a person with minor injuries than to wait for emergency medical services (EMS) to respond. Check with the local authorities for response times. Life threatening emergency situations will only be handled by emergency medical services.
- 3. If the facility lacks toxicological capacity, arrangements will be made for consultant services.
- 4. Before mobilization on-Site, the FSM will contact the local hospital emergency room personnel, local fire department, and local police department to brief them regarding the scope and hazards associated with the scheduled fieldwork. If the Site is outside an established town, contact will be made with county officials and local emergency services.
- 5. An emergency first aid kit with contents as per ANSI 2308.1-1, 1998 will be readily available on the Site, and personnel will have first aid training. The first aid kit also contains equipment necessary to protect first aid providers against the contraction of bloodborne pathogens. All first aid providers will have received Bloodborne Pathogens training and have been offered Hepatitis B vaccinations according to the Bloodborne Pathogens section of Appendix A in Chapter 8, Corporate Health and Safety Policy and Procedure Manual.
- 6. Any person who becomes ill or injured in the exclusion zone must be decontaminated as well as possible with consideration to which risk will be greater, the spread of contamination or the health of the individual. If the injury or illness is minor, full decontamination (remove contaminated clothing and wash hands and face with soap and water, See Section 7.1) should be completed and first aid administered before transport. If the patient's condition is serious, at least partial decontamination should be completed (i.e., complete disrobing of the victim and redressing in

clean coveralls or wrapping in a blanket). First aid should be administered while awaiting an ambulance or paramedics. The Field Site Manager is trained and certified in first aid and CPR.

- 7. If an injured victim is unconscious, notify EMS. Inform the EMS dispatcher as to the nature of the emergency. Do not move the victim unless it is absolutely necessary. Remain with the victim and wait for orders by the EMS dispatcher. The EMS dispatcher should determine what help is needed. Anyone transported to a clinic or hospital for treatment should take information on the chemicals they have reason to believe been exposed to at the Site.
- 8. When required, any vehicle used to transport contaminated personnel will be decontaminated.
- 9. Provisions must be made to identify the substance to which the worker has been exposed. This information must be given to medical personnel.

#### 9.2 EMERGENCY EQUIPMENT

- A personal eyewash unit that meets ANSI Z358.1-1998, Section 6 will be available in each BMcD field vehicle at the Site. When chemical exposures have a pH of <3 or >11. The main purpose of the eyewash unit is to provide immediate flushing. With this accomplished, the individual may then be transported to the hospital for professional care. An ANSI Approved First-Aid Kit contains an eyewash bottle.
- 2. An emergency spill cleanup kit will be available in the field office at all times. Unplanned releases will be reported to the SHSS and/or FSM as soon as possible.
- 3. Sufficient water and/or dry chemical fire extinguishers (Class A, B, and C) will be maintained on the Site to cope with any situation until emergency services arrive.

## 9.3 FLAMMABLE CONDITIONS

- 1. In the event that combustible vapors exceed 10 percent of the LEL or strong odors are detected in the borehole/ excavation, the following actions should be taken:
  - X Continue investigation using extreme caution. Personal protective equipment may need to be upgraded.

- X Allow vapors to dissipate or use intrinsically-safe mechanical ventilation.
- X If atmospheric conditions do not change, call in the listed sequence:
  - Project Manager
  - Health and Safety Manager,
  - Fire Department
- X Provide answering personnel with the call back numbers, locations, directions, and situation assessment.
- 2. In the event that combustible vapors exceed 20 percent of the LEL, the following actions should be taken:
  - X Eliminate all ignition sources, smoking, and electric cutoff switches from the area. Do not turn electric switches on or off if strong odors are present, unless the switch is intrinsically safe. Do not allow cars to operate in the vicinity.
  - X Move personnel away from borehole.
  - X If atmospheric conditions do not change, call in the listed sequence:
    - Project Manager,
    - Health and Safety Manager,
    - Fire Department
  - X Provide answering personnel with the call back numbers, locations, directions, and situation assessment.

## 9.4 SITE EVACUATION CONDITIONS

The following conditions will necessitate the cessation of fieldwork in the area of concern, withdrawal from the work area, and revisions to this SHSP:

- X Fires and/or explosions
- X Unexploded ordnance is detected
- X A major accident or injury occurs
- X CGI readings above 20 percent LEL.
- X CGI readings above 23.5 percent oxygen concentration
- X CGI readings at or below 19.5 percent oxygen concentration
- X PID readings over 50 ppm sustained for more than 2 minutes
- X Detector tube readings over the maximum action level for the contaminant specified
- X Radiation levels greater than twice background (if applicable)

#### 9.5 EMERGENCY COMMUNICATION SYSTEM

Emergency contacts and telephone numbers are provided at the beginning of this SHSP. Field crews will have some communication device at each active work location. These may include radios, mobile telephones, or walkie-talkies. Such communication devices will have sufficient range to contact the field office and/or emergency services. If an emergency occurs on-Site, the FSM is responsible for checking that appropriate emergency contact has been notified. At the time of the emergency response, the FSM or designee will brief the emergency personnel on the status of the emergency, including Site conditions. Copies of the emergency procedures and maps will be kept in all Burns & McDonnell WCD Site vehicles and the field office, if appropriate.

Field personnel will use hand signals if there are noisy working conditions on the Site. The hand signals that will be used are shown below and will be reviewed by the SHSS during the on-Site safety briefing.

Signal	Meaning
Hands on top of head	Need assistance
Grip partner's wrist or place both hands around partner's arm	Leave area immediately
Thumbs up	OK; I am all right
Thumbs down	No; Negative
Hand gripping throat	Cannot breathe; Out of air

## 9.6 EMERGENCY RESPONSE FOLLOW-UP

If there is an accident, near-miss, or emergency response, the SHSS and/or the PHSM will investigate the Site and conduct interviews of all individuals involved in order to determine the actions taken before,

during, and following the incident to determine if work may proceed. This initial investigation will be documented using the Incident Report Form (see Appendix B). The SHSS and/or other PHSM will then provide a critique of the response actions and training for individuals involved in the response trying to minimize the risk of further incidents and improve future response efforts.

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